

ABSTRACT OF THE DISCLOSURE

Processes to overcome mistakes, such as, incorrect film thicknesses, poor coating quality, and incorrect feature dimensions made during the lithographic process in multilayer imaging systems are provided. To optimize manufacturing efficiency, it is desirable to be able to remove the top layer (an imaging layer) without having to remove, recoat, and usually cure the bottom layer (undercoat or underlayer). A rework process for removing an imaging layer from a substrate stack is such a process. The stack comprises a substrate, an underlayer adjacent to the substrate, and an imaging layer comprising silicon adjacent to the underlayer. The process comprises the steps of:

- (a) contacting the substrate stack with an imaging layer removal solvent;
- (b) removing the imaging layer with the imaging layer removal solvent thereby forming a substrate/underlayer stack, wherein the imaging layer removal solvent is selected from the group consisting of: glycol ethers, ketones, esters, lactates, dimethylsulfoxide (DMSO), dimethylformamide (DMF), tetrahydrofuran (THF), methyl tetrahydrofuran, dioxane, tetrahydropyran, ethyl tetrahydropyran-4-acetate, methyl tetrahydropyran-4-methanol, tetrahydropyran-4-one, n-butyl acetate, n-amyl acetate, and any combinations thereof; and
- (c) removing the imaging layer removal solvent from the substrate/underlayer stack after the imaging layer is removed.